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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/774,484

01/30/2001

John R. Lau

22719-1015

5334

7590

10/04/2004

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EXAMINER

MITCHELL, GREGORY W

ART UNIT

PAPER NUMBER

1617

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/774,484

**Applicant(s)**

LAU, JOHN R.

**Examiner**

Gregory W Mitchell

**Art Unit**

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is in response to the papers filed by Applicant on January 30, 2001. Claims 1-6 are pending and are examined herein.

#### ***Priority***

This application is a continuation of application 08/315,359, filed September 30, 1994 (now USPN 6207192).

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

#### ***Claim Objections***

Claim 5 is objected to because of the following informalities: it is not terminated with a period. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected for being vague and indefinite because it is unclear to Examiner what limitations are meant to place upon the claim by the following language:

1. "consisting of a plurality of said substance attachments to mucin coated surfaces"
2. "said substance functioning in concert with other said substances;"
3. "whereby, said substances are capable of sequestering organic molecules;"  
and
4. "whereby, said organic molecules may leach from said substances."

Phrase (1) could be interpreted to mean that the substance is either attached to a mucin or that it is intended to be attached to a mucin. Phrase (2) could be interpreted to mean that the substance is meant to be utilized in concert with other such substances or that it is simply capable of being used with other such substances. Phrase (3) could be interpreted to mean that the substance is meant to be a composition comprising (a) a compound comprising a positively charged hydrophilic head group covalently attached to a hydrophobic tail group and (b) an organic molecule, wherein said organic molecule is sequestered by the hydrophilic/hydrophobic compound; or that the compound comprising a positively charged hydrophilic head group covalently attached to a hydrophobic tail group *is*, itself, the substance, wherein the compound sequesters any organic molecules that may come in contact with said substance. Likewise, phrase (4) could be interpreted as a composition that releases the organic molecule; or as a substance that first traps an organic molecule that comes into contact with it and then later releases said organic compound.

For examination purposes, Examiner interprets the claim to encompass a composition comprising (i) a single type of compound positively charged hydrophilic head group covalently attached to a hydrophobic tail group and (ii) an organic compound which is not encompassed by the scope of (i). Examiner further interprets the composition to have the intended use of being used to first sequester the organic compound and then to leach said organic substance.

Claim 1 is also rejected for being vague and indefinite because it appears to be missing limitations (it is terminated with a semi-colon).

Claims 2-6 are rejected for depending on a vague and indefinite claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pensak et al. (USPN 3864472) in view of Bluhm (USPN 4083965).

Pensak et al. teaches a lemon-flavored mouthwash composition comprising, for example, denaturing components that serve as flavoring agents, such as menthol; and antibacterial agents, such as N-cetyl pyridinium bromide (Abstract; col. 1, lines 42-63; col. 3, lines 1-12).

Pensak et al. does not specifically teach a composition comprising menthol and N-cetyl pyridinium bromide nor does Pensak et al. specifically teach a composition comprising an anesthetic agent.

Bluhm teaches that menthol is a mild anesthetic (col. 2, lines 1-3).

It would have been obvious to one of ordinary skill in the art to prepare a mouthwash composition comprising menthol (a flavorant and an anesthetic agent) and N-cetyl pyridinium bromide (a compound comprising a positively charged hydrophilic head group covalently attached to a hydrophobic tail group) because, as taught by Pensak et al., it is preferred to use denaturing components, such as menthol, and antimicrobial agents, such as N-cetyl pyridinium bromide, in mouthwash compositions. One would have been motivated to prepare such a composition because of an expectation of success in preparing a visually clear, stable mouthwash having the stimulating and refreshing taste of lemon, as taught by Pensak et al. (col. 1, lines 2-8).

It is Examiner's position that the sequestering and leaching of the menthol (an organic molecule, a therapeutic, a flavorant and an anesthetic) by the N-cetyl pyridinium bromide is a property of the composition. It has been held that the discovery of a previously unappreciated property of a prior art substance does not render the old substance patentably new to the discoverer. *Atlas Power Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999).

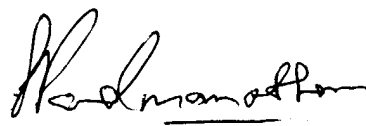
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W Mitchell whose telephone number is 571-272-2907. The examiner can normally be reached on M-F, 8 AM - 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gwm

  
SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER